

Claims

What is claimed is:

1. A joint prosthesis comprising:
a first member for engaging a first bone portion, the first member comprising a first surface with a first curve;
a second member for engaging a second bone portion, the second member comprising a second surface with a second curve;
wherein the first member is translatable with respect to the second member and the second curve is positioned within the first curve to bias the first and second curves towards alignment along a first axis passing through the first and second bone portions.
2. The joint prosthesis of claim 1 wherein the first curve has a first constant radius and a first center point, and the second curve has a second constant radius and a second center point.
3. The joint prosthesis of claim 2 wherein the first constant radius is larger than the second constant radius.
4. The joint prosthesis of claim 2 wherein alignment comprises alignment of the first and second center points along the first axis.
5. The joint prosthesis of claim 2 wherein the first curve has a first interior area defined by the sweep of the first constant radius and the second curve is positioned within the interior area.
6. The joint prosthesis of claim 1 wherein the first curve has a variable radius.
7. The joint prosthesis of claim 1 wherein the first curve has a combination of curved and flat portions.

8. The joint prosthesis of claim 1 further comprising a center member interposed between the first and second members.
9. The joint prosthesis of claim 8 wherein the center member articulates between the first and second surfaces as the first member is translated relative to the second member.
10. The joint prosthesis of claim 1 wherein the second surface has a semi-cylindrial protrusion extended along a lateral axis.
11. The joint prosthesis of claim 1 wherein the second surface has a semi-spherical protrusion.
12. The joint prosthesis of claim 1 wherein the first and second surfaces have depressions.
13. The joint prosthesis of claim 1 further comprising a restraint mechanism for restricting motion along a second axis orthogonal to the first axis.
14. The joint prosthesis of claim 1 wherein the first member is translatable with respect to the second member along a third axis orthogonal to the first and second axes.
15. The joint prosthesis of claim 1 further comprising a neutral position and a first position wherein in the first position, the implant is biased to move toward the neutral position.
16. The joint prosthesis of claim 15 wherein in the first position, the first curve is in closer conformance with the second curve.
17. The joint prosthesis of claim 1 wherein the first curve is wider than the second curve.
18. The joint prosthesis of claim 1 wherein the first curve is superior to the second curve along the first axis.

19. The joint prosthesis of claim 1 wherein the first surface is concave and the second surface is convex.
20. The joint prosthesis of claim 1 wherein the first and second surfaces are concave.
21. The joint prosthesis of claim 1 wherein the first and second bone portions comprise a shoulder joint.
22. The joint prosthesis of claim 1 wherein the first and second bone portions comprise a knee joint.
23. The joint prosthesis of claim 1 wherein the first and second bone portions comprise a hip joint.
24. A joint prosthesis comprising:
 - a first member for engaging a first bone portion, the first member comprising a first curved surface;
 - a second member for engaging a second bone portion, the second member comprising a second curved surface;
 - wherein as the first member is translated with respect to the second member, conformity between the first and second curved surfaces increases.
25. A method for installing a joint prosthesis device between two bone portions, the method comprising:
 - engaging a center member with a first curved surface of a first member;
 - engaging the center member with a second curved surface of a second member;
 - positioning the second curved surface within an interior area of the first curved surface;
 - engaging the first member with a first bone portion; and
 - engaging the second member with a second bone portion,
 - wherein the first member is translatable and further wherein the first and second curved surfaces are biased toward alignment along an axis passing through the first and second bone portions.

26. A joint prosthesis comprising:

a first member for engaging a first bone portion, the first member comprising a first relatively flat surface, wherein the first relatively flat surface includes a perimeter lip;

a second member for engaging a second bone portion, the second member comprising a second curved surface;

wherein the first member is translatable with respect to the second member and wherein the second curve is positioned on the first relatively flat surface, within the perimeter lip allowing the second member to move unconstrained within perimeter lip.